

Running Jobs Before Pleiades Dedicated Time

Category: Tips & Tricks

The PBS batch scheduler on Pleiades now supports a feature called shrink-to-fit (STF). This feature allows you to specify a range of acceptable wall times for a job, so that PBS can run the job sooner than it might otherwise. STF is particularly helpful when scheduling jobs before an upcoming dedicated time.

For example, suppose your typical job requires 5 days of walltime. If there are less than 5 days before the start of dedicated time, the job won't run until after dedicated time. However, if you know that your job can do enough useful work running for 3 days or longer, you can submit it in the following way:

```
qsub -l min_walltime=72:00:00,max_walltime=120:00:00 job_script
```

When PBS attempts to run your job, it will initially look for a time slot of 5 days; but when no such time slot is found between now and the dedicated time, it will look for shorter and shorter time slots, down to the **min_walltime** of 3 days.

If you have an existing job that is still queued, you can use the **qalter** command to add these **min_walltime** and **max_walltime** attributes:

```
qalter -l min_walltime=hh:mm:ss,max_walltime=hh:mm:ss jobid
```

Or change the wall time with the command:

```
qalter -l walltime=hh:mm:ss jobid
```

If you have any questions or problems, please contact the NAS Control Room at support@nas.nasa.gov.

Article ID: 306

Last updated: 08 Jan, 2013

Tips & Tricks -> Running Jobs Before Pleiades Dedicated Time

<http://www.nas.nasa.gov/hecc/support/kb/entry/306/?ajax=1>